

18. Book of registry.—The registrar shall under section 20 of the Ordinance keep and maintain a register book in Form IX in which shall be entered the particulars contained in the certificate of registry of the inland ship.

19. Issue of a new certificate of registry in case of loss, etc.—Where a certificate of registry of an inland ship is mislaid, lost, destroyed or mutilated, the registrar shall grant a duplicate certificate in lieu of her original certificate under section 22 of the Ordinance on payment of a fee of Taka two hundred and fifty.

20. Fee for transfer of registered inland ship.—Where a registered inland ship is transferred, a transfer fee of taka one thousand shall accompany the bill of sale.

CHAPTER III

CERTIFICATE OF COMPETENCY FOR MASTERS, INLAND ENGINEERS AND ENGINE-DRIVERS

21. Submission of application form for masters, etc.—(a) A candidate for examination for a certificate of competency for master shall make an application in Form X together with the candidate's testimonial in Form XI, service book in Form XII, and three copies of attested photographs to the Chairman of the Board of Examiners not later than seven days before the date of examination.

(2) A candidate for examination for a certificate of competency for inland engineer or engine-driver shall make an application in Form X together with the candidate's testimonial in Form XIII, service book in Form XII and three copies of attested photographs to the Chairman of the Board of Examiners not later than seven days before the date of examination.

(3) A candidate for examination for a certificate of competency for master, inland engineer or engine-driver shall be free from physical incapacitation and impediment of speech.

22. Verification of service before examination.—(1) The testimonials referred to in rule 21 shall be issued by the owner which shall certify about the applicants service on board an inland ship for at least twelve months preceding the date of application for examination.

(2) An applicant who has not served on board an inland ship within the last twelve months preceding the date of application for examination shall be required to produce satisfactory evidence of his conduct and activities for that period.

23. Eligibility of a candidate for appearing at an examination for certificate of competency for third class master.—(1) A candidate appearing at an examination for certificate of competency for third class master shall not be less than twenty-one years of age and, if the Chairman of the Board of Examiners doubts

the age of any candidate, the candidate shall be required to produce his birth certificate or a certificate from a Civil Surgeon.

(2) A candidate shall, before the examination, pass the vision test (without glasses) and lantern tests to be conducted by the Chairman of the Board of Examiners or by an examiner nominated by the Chairman.

(3) A candidate who fails to pass the vision test may appear again for such test at an interval of three months and a candidate who fails to pass in lantern test may appear again for such test three times only at intervals of three months.

(4) A candidate shall have served for at least three and a half years on board a power-driven inland ship of over 50 brake horse-power in the Seamen branch, the last twelve months of which shall have been served as Helmsman.

Provided that a candidate who has successfully completed Marine Apprenticeship Course at the Deck Personnel Training Centre shall not be required to put in service as Helmsman.

(5) If a candidate fails to pass the written or viva voce tests, he shall not be eligible to appear at the examination unless he has rendered additional service for at least three months as Helmsman on an inland ship.

24. Tests for third class master's certificate.—A candidate for certificate of competency for third class master shall appear at an examination in written test in simple arithmetic and essay in Bengali and only if he passes in the written tests, he shall appear in the viva voce tests on the following subjects, namely:—

- (a) the General Principles of River Navigation including Rules of the Road;
- (b) the Storm Signals;
- (c) the General Port Rules of Bangladesh;
- (d) the River Knowledge and Pilotage;
- (e) the use of Fire Fighting and Life Saving Appliances;
- (f) the Management of Inland Ships;
- (g) the Basic Knowledge of the provisions of the Inland Shipping Ordinance, 1976 (LXXII of 1976).

25. Eligibility of a candidate for appearing at an examination for certificate of competency for second class master.—(1) A candidate appearing at an examination for certificate of competency for second class master must have passed the examination for certificate of competency for third class master.

(2) Notwithstanding anything contained in sub-rule (1) —

- (a) Leading seaman, petty officer, chief petty officer and master chief petty officer from the Executive branch of the Bangladesh Navy having at least ten years' active service may appear at the examinations for the certificate of competency for second class master, provided he has put in twelve months' service in inland waters of Bangladesh;
- (b) Deck Hands of foreign going vessels having at least three years' service as Helmsman may appear at the examinations for the certificate of competency for second class master, provided he has put in twelve months' service in inland waters of Bangladesh.

(3) A candidate shall, before the examination, pass the vision test (without glasses) to be conducted by the Chairman of the Board of Examiners or by an examiner nominated by the Chairman.

(4) A candidate who fails to pass the vision test may appear again for such test at an interval of three months.

(5) A candidate shall have served for at least two years as in-charge on board an inland ship of not less than 100 brake horse-power or three years as Helmsman on board an inland ship of more than 250 brake horse-power.

(6) If a candidate fails to pass the written or viva voce tests, he shall not be eligible to appear at the examination unless he has rendered additional service for at least three months as in-charge or Helmsman of an inland ship of not less than 100 brake horse-power.

26. Tests for second class master's certificate.—A candidate for certificate of competency for second class master shall appear at an examination in written tests in—

(a) Elementary knowledge of cargo work;

(b) Tide; and

(c) Elementary knowledge in compass; and only if he passes in the written tests, he shall appear in the viva voce tests on the following subjects, namely :—

(i) the General Principles of River Navigation including Rules of the Road;

(ii) the Storm Signals;

(iii) the General Port Rules of Bangladesh;

(iv) the River Knowledge and Pilotage;

(v) the use of Fire Fighting and Life Saving Appliances;

(vi) the Management of Inland Ships;

(vii) the Inland Shipping Ordinance, 1976 (LXXII of 1976), and the rules made thereunder.

27. Eligibility of a candidate for appearing at an examination for certificate of competency for first class master.—(1) A candidate appearing at an examination for certificate of competency for first class master must have passed the examination for certificate of competency for second class master and have also undergone three months, Refreshers or Certification Course at the Deck Personnel Training Centre.

(2) Notwithstanding anything contained in sub-rule (1),—

(a) Officers in Executive branch of the Bangladesh Navy having watch-keeping experience of at least three years may appear at the examination for the certificate of competency for first class master, provided he has put in at least six months' service in inland waters of Bangladesh;

(b) persons holding certificate of competency of at least Second Mate (Foreign Going) and First Mate (Home Trade) may appear the examinations for the certificate of competency for first class master, provided he has put in at least six months' service in inland waters of Bangladesh.

30. Eligibility of a candidate for appearing at an examination for certificate of competency for third class engine-driver (motor).—(1) A candidate appearing at an examination for certificate of competency for third class driver shall not be less than twenty-one years of age and, if the Chairman of the Board of Examiners doubts the age of any candidate, the candidate shall be required to produce his birth certificate or a certificate from a Civil Surgeon.

(2) A candidate shall have served for at least three and a half years in the engine room of a power-driven inland ship (motor) of over 50 brake horse-power as fireman, greaser or oilman or fireman, greaser and oilman of which at least two years must have been served within three years before the examination and a testimonial to that effect in Form XIII shall be submitted along with the application made under rule 21 (2):—

Provided that no service of a candidate served before attaining the age of 16 years shall be counted.

(3) A candidate must have read up to class VIII.

(4) If a candidate fails to pass the *viva voce* tests, he shall not be eligible to appear at the examination unless he has rendered additional service for at least three months on an inland ship (motor).

31. Tests for third class engine-driver's certificate (motor).—A candidate for certificate of competency for third class engine driver (motor) shall appear in the *viva voce* tests on the following subjects, namely:—

- (a) Working knowledge of different types of internal combustion engines;
- (b) Names of the principal parts of internal combustion engine;
- (c) Use and maintenance of different types of valves, cocks and pipes;
- (d) Use of different methods of supplying air and fuel to internal combustion engines;
- (e) Elementary knowledge of main-courses for non-starting of engines and remedial measures therefor;
- (f) Knowledge of over-hauling of engines, wear and tear of different parts, replacement of different parts and assembly of the engine to working condition;
- (g) Precautionary measures to be taken in case of leakage of fuel oil and escape of inflammable vapour;
- (h) Use of fire fighting and life saving appliances.

32. Eligibility of a candidate for appearing at an examination for certificate of competency for second class engine-driver (motor).—(1) A candidate appearing at an examination for certificate of competency for second class engine-driver (motor) must have passed the examination for certificate of competency for third class engine driver (motor).

(2) Notwithstanding anything contained in sub-rule (1),—

- (a) engine mechanic and leading engine mechanic from the Engineering branch of the Bangladesh Navy having at least ten years' active service out of which at least five years on-board a naval motor ship may appear at the examinations for the certificate of competency for second class engine-driver (motor);

- (b) engine room crew of foreign going vessels having at least three years watch keeping service may appear at the examinations for the certificate of competency for second class engine-driver (motor);
- (c) persons holding diploma in Marine Engineering (Technology) or certificate in Marine Engineering from an Institute approved by the Director-General.
3. A candidate shall have served for at least two years as in-charge of the room of an inland ship (motor) of not less than 100 brake horse-power, or three years as driver on board an inland ship (motor) of more than 250 brake-horse-power and a testimonial to that effect in Form XIII shall be submitted with the application made under rule 21 (2).
4. If a candidate fails to pass the written or *viva voce* tests, he shall not be able to appear at the examinations unless he has rendered additional service of at least three months as in-charge or driver on board an inland ship (motor) of not less than 100 brake horse-power.
3. Tests for second class engine-driver's certificate (motor).—A candidate for certificate of competency for second class engine-driver (motor) shall appear for examination in written tests in—
- (a) Simple arithmetic;
- (b) Elementary engineering knowledge;
- (c) Elementary knowledge in magnetism and electricity including battery; only if he passes in the written tests, he shall appear in the *viva voce* tests in following subjects, namely:—
- (i) Working knowledge of different types of internal combustion engines;
- (ii) Names of the principal parts of internal combustion engines;
- (iii) Use and maintenance of different types of valves, cocks and pipes;
- (iv) Use of different methods of supplying air and fuel to internal combustion engines;
- (v) Knowledge of main causes for non-starting of engines and remedial measures therefor;
- (vi) Knowledge of starting and reversing mechanism of engines and rectification of defects therein;
- (vii) Knowledge of overhauling of engines, wear and tear of different parts, replacement of different parts and assembly of the engine to working condition;
- (viii) Knowledge of the properties of different types of fuel oils and lubricating oils in internal combustion engine;
- (ix) Precautionary measures to be taken in case of leakage of fuel oil and escape of inflammable vapour;
- (x) Knowledge of use and maintenance of fire fighting and life saving appliances;
- (xi) Procedure in dry docking.

34. Eligibility of a candidate for appearing at an examination for certificate of competency for first class engine-driver (motor).—(1) A candidate appearing at an examination for certificate of competency for first class engine driver (motor) must have passed the examination for certificate of competency for second class engine-driver (motor).

(2) Notwithstanding anything contained in sub-rule (1),—

- (a) engine room artificer (engine mechanic), chief petty officer (engine mechanic) and petty officer (engine mechanic) from the Engineering branch of the Bangladesh Navy having at least twelve years' active service out of which at least 5 years on board a naval motor ship may appear at the examinations for the certificate of competency for first class engine-driver (motor);
- (b) engine room Serang, Tindal and Donkey man of foreign going vessel having at least three years' watch keeping service may appear at the examinations for the certificate of competency for first class engine driver (motor).

(3) A candidate shall have served for at least two years as in-charge of engine room on board an inland ship (motor) of not less than 250 brake horse-power or three years as engine driver on board an inland ship (motor) of more than 250 brake horse-power and a testimonial to that effect in Form XIII shall be submitted along with the application made under rule 21 (2).

(4) If a candidate fails to pass the written or *viva voce* tests, he shall not be eligible to appear at the examinations unless he has rendered additional service for at least three months as in-charge or engine-driver on board an inland ship (motor) of not less than 250 brake horse-power.

35. Tests for first class engine-driver's certificate (motor).—A candidate for certificate of competency for first class engine-driver (motor) shall appear at an examination in written tests in—

- (a) Arithmetic;
- (b) Engineering Knowledge;
- (c) Magnetism and electricity;

and only if he passed in the written tests, he shall appear in the *viva voce* tests in the following subjects, namely:—

- (i) Principles of working of internal combustion engine; difference between petrol and diesel engines and between four-stroke and two-stroke cycles;
- (ii) Method of supplying air and fuel to the cylinders of different types of engines;
- (iii) Maintenance, overhauling, testing and adjustment of fuel injectors;
- (iv) Knowledge of over-hauling of engines, wear and tear of different parts, replacement of different parts and assembly of the engine to working condition; the periodical examination of working parts;
- (v) Principles of properties of different types of fuel oils and lubricating oils; definition of flash point and viscosity;

- (vi) Precautionary measures regarding bunkering and storage of fuel oil;
- (vii) Principles and operation of pressure gauge, thermometer, barometer, boiler water level indicator and other instruments in the engine room
- (viii) Principles and operation of different types of pumps;
- (ix) Principles and operation of air compressors, steering engines, generator and motor, refrigerating units, hydraulic pumps and other auxiliary machinery;
- (x) Working knowledge on operation of auxiliary steam boilers and steam and condensate lines;
- (xi) Knowledge of prevention, detection and extinction of fire; use of wire gauze diaphragms and safety lamps; importance of ventilation; operation and maintenance of all types of fire fighting appliances and other equipment;
- (xii) Knowledge of use and maintenance of life saving appliances;
- (xiii) Knowledge regarding oil and air pollution;
- (xiv) Maintenance of all types of batteries and precautionary measures at the battery storage space;
- (xv) Preparation for docking and undocking and functions during docking.

36. Eligibility of a candidate for appearing at an examination for certificate of competency for inland engineer (motor).—(a) A candidate appearing at an examination for certificate of competency for inland engineer (motor) shall not be less than twenty-two years of age and shall—

- (a) have passed the Secondary School Certificate examination or equivalent, have completed four years marine apprenticeship from a workshop approved by the Director-General, have at least two years watch keeping service on board an inland ship (motor) of more than 600 brake horsepower as apprentice engineer;

Provided that no apprenticeship of a candidate before attaining the age of sixteen years shall be counted; or

- (b) have obtained the diploma in Marine Engineering (Technology) or certificate in Marine Engineering from an institute approved by the Director-General and have—

- (i) in the case of persons having diploma in Marine Engineering (Technology), not less than two and a half years watch keeping service;

- (ii) in the case of persons having certificate in Marine Engineering, not less than three years watch keeping service;

on board an inland ship (motor) of not less than 600 brake horsepower as apprentice engineer; or

- (c) passed the examination for certificate of competency for first class engine-driver and have after obtaining the certificate of competency for first class engine-driver completed at least two years of service on board an inland ship (motor) of not less than 600 brake horsepower as in-charge or engine-driver; or

(3) A candidate shall, before the examinations, pass the vision test (without glasses) to be conducted by the Chairman of the Board of Examiners or by an examiner nominated by the Chairman.

(4) A candidate who fails to pass the vision test may appear again for such at an interval of three months.

(5) A candidate shall have served for at least two years as in-charge on board an inland ship of not less than 250 brake-horse-power or three years as second-in-charge on board an inland ship of not less than 250 brake-horse-power.

(6) If a candidate fails to pass the written or viva-voce tests, he shall not be able to appear at the examination unless he has rendered additional service for at least three months as in-charge or Second-in-charge on board an inland ship of not less than 250 brake-horse-power.

28. **Tests for first class master's certificate.**—A candidate for certificate of competency for first class master shall appear at an examination in written in—

(a) Elementary Knowledge of Stability and Ship Construction; and

(b) Elementary Knowledge of Chartwork;

only if he passes in the written tests, he shall appear in the viva-voce tests in the following subjects, namely:—

(i) the General Principles of River Navigation including the Rules of the Road;

(ii) the Storm Signals;

(iii) the General Port Rules of Bangladesh;

(iv) the River Knowledge and Pilotage;

(v) the use of Fire Fighting and Life Saving Appliances;

(vi) the Management of Inland Ships;

(vii) the Compass;

(viii) the Tide;

(ix) the Signals and Communications;

(x) the Inland Shipping Ordinance, 1976 (LXXII of 1976), the rules made and notifications issued thereunder.

29. **Remission of service on board an inland ship.**—Notwithstanding anything contained in rules 23 (4), 25 (5) and 27 (5), for the purposes of appearing at certificate of competency examination,—

(a) three months' Refreshers or Certification Course successfully completed by a candidate shall be counted towards qualifying service on board an inland ship;

(b) Marine Apprenticeship Course at the Deck Personnel Training Centre having been successfully completed by a candidate and appearing at an examination for third class master shall be allowed remission of half the training period but not exceeding twelve months towards qualifying service on board an inland ship.

- (d) be of the rank of master chief engine room artificer or chief engine room artificer from the Engineering branch of the Bangladesh Navy having at least twelve years active service out of which at least five years on board a naval motor ship; or
- (e) have served as an engineer of foreign going vessels having at least two years watch keeping service.
- (2) A candidate referred to in sub-rule (1) (a) who has completed marine apprenticeship from a workshop shall submit a testimonial in Form XIII along with his application made under rule 21 (2).
- (3) A candidate referred to in sub-rule (1) (a), (b) or (c) who has completed the requisite service on board an inland ship (motor) shall submit a testimonial in Form XIII along with his application made under rule 21 (2).
- (4) If a candidate other than a candidate mentioned in sub-rule (1) (b) (e) fails to pass the written or *viva voce* tests, he shall not be eligible to appear at the examinations unless he has rendered additional service for at least three months on board an inland ship (motor) of not less than 600 brake horsepower.

37. Tests for inland engineer (motor).—A candidate for certificate of competency for inland engineer (motor) shall appear at an examination in written tests in—

- (a) Mathematics;
- (b) Engineering Knowledge (motor);
- (c) General engineering knowledge and general science;
- (d) Engineering drawing;

and only if he passes in the written tests, he shall appear in the *viva voce* tests in the engineering knowledge required for the use, operation and maintenance of the machinery, equipment and ship structure usually in the charge of the engineer officer including knowledge of the managerial responsibilities of a certificated engineer, management of engines and auxiliary boilers, electrical machinery, prevention of fire, methods of fighting of fires at sea, supervisory duties and work to be done in port and the periodical examination of the working parts.

38. Examinations of engine-driver (steam) and inland engineer (steam).—(1) The qualifications required to appear in the various grades of certificate of competency (steam) examination shall be similar to those required for corresponding grade of certificate of competency (motor) examinations.

(2) The service on board an inland ship required for certificate of competency (steam) shall be the same as that required for the corresponding grade of certificate of competency (motor);

Provided that out of the total service, at least two years shall have been spent on steam engine and boilers of corresponding power.

(3) For the purpose of this rule, the equivalence of brake horse-power and nominal horse-power shall be as follows:—

Brake horse-power	Nominal horse-power
50	9
250	44
600	106
1000	177

39. **Endorsement of certificates.**—(1) The Director-General shall determine the quantum of service on board an inland ship and other terms and conditions required for obtaining steam or motor endorsement by a candidate of any grade of certificate of competency.

(2) The endorsement shall be made on payment of the fees specified in part III of Form III.

40. **Examination fees for the masters, inland engineers and engine-drivers.**—The fees for examination for certificate of competency for masters, inland engineers and engine-drivers shall be paid at the rate specified in Part IV of Form III.

41. **Issue of a new certificate of competency in case of loss, etc.**—Where a certificate of competency for master, inland engineer or engine driver is mislaid, lost, destroyed or mutilated, the Director General shall, on an application made in this behalf, grant a duplicate certificate in lieu of the original certificate on payment of a fee of taka one hundred.

42. **Certificate and licence.**—(1) A candidate shall, after passing the examination, be granted a certificate of competency of the grade under section 36 of the Ordinance in the appropriate part of Form XIV as is applicable to him.

(2) A person may be granted a licence in accordance with the provision of section 38 of the Ordinance in the appropriate part of Form XIV as is applicable to him.

CHAPTER IV

PROTECTION OF VESSELS AND PASSENGERS

43. **Life saving apparatus.**—(1) Every inland ship carrying passengers shall carry—

- (a) such number of life buoys as is equal to five per cent of the capacity of passengers including crew members;
- (b) such number of life jackets as is equal to five per cent of the capacity of passengers including crew members plus such number of life jacket for children as is equal to one per cent of the capacity of passengers.

(2) Every inland ship other than a ship carrying passengers shall carry such number of life buoys as is equal to fifty per cent of the capacity of the crew members.

(3) The life buoys and life jackets shall be of the design approved by the Director-General and painted with the name of the inland ship and be kept in readily accessible places on board the inland ship for ready use.

44. Fire-fighting equipment.—(1) Every inland ship shall carry the following fire fighting equipment according to the scale specified below:—

(a) for inland ships having engine up to 50 brake horse-power:—

- (i) one foam or CO₂ type fire extinguisher of 9 litre capacity in the machinery space;
- (ii) one foam or soda-acid type fire extinguisher of 9 litre capacity in the accommodation space; and
- (iii) two fire buckets each of 9 litre capacity with 4 metre lanyard attached to each bucket placed at accessible places;

(b) for inland ships having engine of over 50 brake horse-power but not exceeding 250 brake horse-power—

- (i) one foam and one CO₂ type fire extinguisher each of 9 litre capacity in the machinery space;
- (ii) one foam or soda-acid type fire extinguisher of 9 litre capacity in the accommodation space; and if the inland ship carries passengers, one additional foam or soda-acid type fire extinguisher;
- (iii) six fire buckets each of 9 litre capacity with 4 metre lanyard attached to each bucket placed at accessible places; and

(iv) one sand box containing at least 0.5 cubic meters of sand with a scoop in the machinery space;

(c) for inland ships having engine of over 250 brake horse-power but not exceeding 600 brake horse-power—

(i) one foam and one CO₂ type fire extinguisher of 9 litre capacity or one dry powder type fire extinguisher of 4.5 kg. in the machinery space;

(ii) two foam or soda-acid type fire extinguishers each of 9 litre capacity in the accommodation space, and if the inland ship carries passengers, two additional foam or soda-acid type fire extinguishers;

(iii) ten fire buckets each of 9 litre capacity with 4 metre lanyard attached to each bucket placed at accessible places;

(iv) one sand box containing at least 0.5 cubic meters of sand with a scoop in the machinery space;

(v) two fire hoses each of 10 metre length with nozzles, one on each side of the inland ship; and

(vi) one fire axe;